

## Book review

### The Science of Marijuana, 2nd edn

Leslie L Iversen. Published by Oxford University Press, Oxford, UK, 2008. 273 pp, price £15.99, ISBN-13: 978-0-19-532824-0

As pointed out in the Preface to this book, 'the past 6 years have seen an exciting transformation of cannabis research from the study of a plant-derived psychoactive drug (delta-9-tetrahydrocannabinol) (THC) to a flourishing new field of basic medical research that offers great scientific and medical promise for the future'. This transformation has been triggered by 'the discovery that the brain contains its own 'cannabis-like' chemical messenger system – a finding potentially as important as the much publicized discovery of a naturally occurring series of morphine-like chemicals in the brain – the endorphins – in the 1970s'. It is this dramatic scientific and clinical expansion of the cannabinoid field that has quite rightly prompted the production of this second edition.

*The Science of Marijuana* provides an intriguing, objective and well-balanced account of the many facets of marijuana (cannabis). It sets the scene by explaining what cannabis is and referring to its use over many centuries for medicinal, religious and recreational purposes. It then goes on to describe effects on the brain of single and repeated cannabis administration, the pharmacology of the main psychoactive ingredient of cannabis (THC), and the discovery in the 1990s that our own tissues produce chemicals that share the ability of THC to activate specific cannabinoid receptors. Also discussed are some of the functions of these endogenous cannabinoids (endocannabinoids) in health and disease, the fact that synthetic and cannabis-derived chemicals that mimic the actions of endocannabinoids are now available as licensed medicines, and some

potential future clinical uses for such chemicals. The book concludes by considering the recreational use of cannabis: for example, how safe or dangerous cannabis is particularly when smoked, possible links between recreational cannabis and mental illness, who should avoid taking cannabis, past cannabis inquiries and current cannabis laws – and whether these laws should be softened or hardened.

One attractive feature of *The Science of Marijuana* is that it avoids excessive detail or scientific jargon, instead wetting the reader's appetite for more facts about cannabis and cannabinoids, just as cannabis itself is said to wet one's appetite for food. Thus, the book presents its readers with a set of important bottom-line messages. These it illustrates in a highly readable manner with just a few well-chosen examples, at the same time providing a gateway to additional detail through its excellent list of references. Consequently, this book is a 'must read' for anyone requiring easy access to information about cannabis or individual cannabinoids, be this a scientist, physician or student, a politician, government advisor, lawyer, policeman or journalist wrestling with the political aspects, legal issues and social costs of illicit recreational cannabis, a parent or teacher, or indeed a person who takes cannabis either recreationally or as a medicine... or is thinking about doing so. Hopefully, this book will through its readership help to spark fresh debate about recreational cannabis that is sufficiently informed, prudent, rational, objective and multifaceted to produce at last some long-awaited 'right answers' to the question 'What next?'.

#### CORRESPONDENCE

Roger Pertwee, School of Medical Sciences, Institute of Medical Sciences, University of Aberdeen, Foresterhill, Aberdeen AB25 2ZD, UK. E-mail: rgp@abdn.ac.uk

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